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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/384,315	08/27/1999	ALAIN BOUILLOUX	ATOCM-154	7591

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EXAMINER

SELLERS, ROBERT E

ART UNIT	PAPER NUMBER
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1712

DATE MAILED: 03/14/2003

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No. 09/384,315	Applicant(s) BOUILLOUX ET AL.	
	Examiner Robert Sellers	Art Unit 1712	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☐ Responsive to communication(s) filed on ____.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 20-34 and 36-52 is/are pending in the application.
- 4a) Of the above claim(s) 23,30,33,34,36,37,39,40 and 42-44 is/are withdrawn from consideration.
- 5) ☐ Claim(s) ____ is/are allowed.
- 6) ☒ Claim(s) 20, 30, 32, 38, 41 and 45-52 is/are rejected.
- 7) ☐ Claim(s) ____ is/are objected to.
- 8) ☐ Claim(s) ____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on ____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on ____ is: a) ☐ approved b) ☐ disapproved by the Examiner.
If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. §§ 119 and 120

- 13) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. ____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
* See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).
a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

Attachment(s)

- | | |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) Paper No(s). ____. |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449) Paper No(s) ____. | 6) <input type="checkbox"/> Other: _____ |

Claims 21, 22, 22, 24-29, 31, 33, 34, 36, 37, 39, 40 and 42-44 are withdrawn from further consideration pursuant to 37 CFR 1.142(b) as being drawn to nonelected species, there being no allowable generic or linking claim. Election was made **without** traverse in Paper No. 6.

Claim 23 was inadvertently omitted from the withdrawn claims since the partially or completely hydrolyzed anhydride copolymers are not within the realm of the elected species of ethylene/(meth)acrylic acid copolymer for copolymer (C) (election filed February 20, 2001, Paper No. 7). Claim 40 denoting an ethylene/alkyl (meth)acrylate/(meth)acrylic acid copolymer is also not embraced by the elected species.

It is noted that withdrawn claim 23 in lines 2-3 contains the phrase "a polyolefin grafted with an unsaturated epoxide and having two epoxide groups." The portion "and having two epoxide" groups is not enabled and should be stricken.

The text of those sections of Title 35, U.S. Code not included in this action can be found in a prior Office action.

Claims 48, 50 and 52 are rejected under 35 U.S.C. 112, first paragraph, as containing subject matter which was not described in the specification in such a way as to reasonably convey to one skilled in the relevant art that the inventors had possession of the claimed invention at the time the application was filed.

There is no support on page 5, line 36 to page 6, line 3 for the characterization in claim 48 that "copolymer (C) promotes the crosslinking of copolymers (A) and (B).

The source of the weight ratios of (C)/(B) of claims 50 and 52 cannot be found.

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Claims 20, 30, 38, 41, 45, 46 and 48-52 are rejected under 35 U.S.C. 112, first paragraph, as containing subject matter which was not described in the specification in such a way as to enable one skilled in the art to which it pertains, or with which it is most nearly connected, to make and/or use the invention.

Page 3, lines 14-17 describes component (A) as a copolymer of ethylene and an unsaturated epoxide. The "copolymer made from an unsaturated epoxide" required in independent claims 20, 45 and 46 are not fully enabled unless the ethylene co-monomer is included. Page 3, lines 14-15 as modified in the amendment filed July 13, 2001 (Paper No. 10) should describe the ethylene and unsaturated epoxide of (A) as a copolymer as substantiated by page 3, lines 16-17 as opposed to a mere mixture of ethylene and an unsaturated epoxide.

Claim 49, 50 and 52 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

The proportion of copolymer (C) is not clearly defined as based on (B) as expressed on page 6, lines 2-3 of the specification.

The weight ratios are not concisely denoted in the absence of a denominator. For example, the ration of claim 50 of 0.2-0.8 could be interpreted as 0.2:0.8 if not represented by 0.2:1 to 0.8:1.

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Claims 20, 30, 32, 38 and 45-52 are rejected under 35 U.S.C. 103(a) as being unpatentable over Spelthann.

The rejection is maintained for the reasons of record set forth in the previous Office actions. The arguments filed March 4, 2003 have been considered but are unpersuasive.

The teachings of Spelthann are not confined preferred embodiments or examples. The preparation of the polar ethylene copolymer with unsaturated mono- and dicarboxylic acids is explicitly recited in column 4, lines 28-29 and cannot be discounted. There is no evidence of record establishing the criticality of the claimed unsaturated carboxylic acid copolymer (C) over the disclosed copolymer of ethylene, an ethylenically unsaturated organic compound including mono- and dicarboxylic acids, and carbon monoxide (2)(a) of Spelthann exemplified by an ethylene/n-butyl acrylate/carbon monoxide terpolymer (col. 5 table, EnBACO2).

The calculated weight ratio of ethylene/unsaturated acid/carbon monoxide copolymer (2)(a) of Spelthann corresponding to claimed copolymer (C) to carboxylic acid anhydride-containing copolymer (1)(b) corresponding to claimed copolymer (B) presented in the paragraph bridging pages 5-6 of the amendment encompassing a minimum of 0.78:1 is within the claimed maximum of 0.8:1 defined in claim 50.

No criticality is seen in the claimed maximum of 0.5:1 required in claim 52. According to MPEP § 2144.05 (II. Optimization of Ranges), [g]enerally, differences in concentration or temperature will not support the patentability of subject matter encompassed by the prior art unless there is evidence indicating such concentration or temperature is critical."

The evidence presented in Table 1 on page 9 of the specification is inconclusive since the closest prior art copolymer (2)(a) corresponding to claimed copolymer (C) exemplified by ethylene/n-butyl acrylate/carbon monoxide terpolymer is not represented by Example H. Any differences in results could be attributable to the varying amounts of Lotader 2 ethylene/ethyl acrylate/maleic anhydride copolymer.

The showings are not commensurate in scope with the claims regarding a representative sampling of species within the realm of copolymer (C) including such non-tested types as the partially or completely hydrolyzed ethylene/carboxylic acid anhydride copolymer as well as the α,ω -aminocarboxylic acid. The testing of a single weight ratio of (C) (i.e. Lucalene 3110):(B) (i.e. Lotader 2) of 0.50:1 (Examples E and F) does not substantiate the criticality of the weight ratio of (C):(B) of from 0.2:1 to 0.8:1.

The amendment necessitated the new grounds of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO MONTHS** of the mailing date of this final action and the advisory action is not mailed until after the end of the **THREE-MONTH** shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than **SIX MONTHS** from the date of this final action.

(703) 308-2399 (Fax no. (703) 872-9311)
Monday to Friday from 9:30 to 6:00 EST

A handwritten signature in black ink, appearing to read 'Robert Sellers', is positioned above the printed name.

Robert Sellers
Primary Examiner
Art Unit 1712